List of Contents

NUMBER 1

	i	Softstrip® data strip containing the table of contents of this issue
Adedeji B. Badiru	1	Expert systems and industrial engineers: a practical guide to a successful partnership
Godelieve Vanderstraeten and **Michel Bergeron**	15	Automatic assignment of aircraft to gates at a terminal
Bartholomew O. Nnaji	27	Evaluation methodology for performance and system economics for robotic devices
Antonio J. Dieck, Sencer Yeralan and **Nader Salari**	41	Solution to the lot size multi-item deterministic inventory problems with budget and/or space constraints using a microcomputer
Pieter Lindeque and **Paul S. Kruger**	53	The design of a microcomputer based simulator for production management training
V. K. Khare, M. K. Khare and **M. L. Neema**	63	Estimation of distribution parameters associated with facilities design problems involving forward and backtracking of materials

NUMBER 2

	i	Softstrip® data strip containing the table of contents of this issue
Hamed K. Eldin	iii	Computers & Industrial Engineering. A quarterly International Journal
S. Anand, S. Raman and **R. A. Wysk**	77	An algorithm for vertex detection
Patricia A. S. Ralston and **Thomas L. Ward**	85	Adaptive control of machine tools: the past and projected role of numerical control computers
Kwangsoo Kim and **John E. Biegel**	95	A path generation method for sculptured surface manufacture
Yang Byung Park	103	An evaluation of static flowshop scheduling heuristics in dynamic flowshop models via a computer simulation
Young-Gyo Chung, Sabah U. Randhawa and **Edward D. McDowell**	113	A simulation analysis for a transtainer-based container handling facility
Li Lin and **David D. Bedworth**	127	A semi-generative approach to computer-aided process planning using group technology

Golgen Bengu and **Robert P. Davis**	139	Implementation of modeling and analysis techniques using both mainframe and microcomputers
Jatinder N. D. Gupta and **Nazim U. Ahmed**	147	A goal programming approach to job evaluation
Tarek M. Khalil and **Mohamed Z. Ramadan**	153	Biomechanical evaluation of lifting tasks: a microcomputer-based model
Howard W. Oden	161	Developing flexible productivity measurement models using spreadsheet software
Jose A. Ventura and **Donald W. Hearn**	171	Computing the effective resistance in a system of conducting sticks
O. S. Benli, I. Sabuncuoglu and **S. Tufekci**	181	A heuristic procedure for a single-item dynamic lot sizing problem
S. Sridhar	193	Determination of aggregate preventive maintenance programs using production schedules
Hsu-Pin (Ben) Wang	201	A layered architecture for manufacturing operation planning
Anil Mital, Sudiyono Kromodihardjo and **Chetan Channaveeraiah**	211	Quantification of subjective descriptors of part geometry with an aim to increase the sensitivity of group technology
Sanjiv Sarin and **Balasubramanian Ram**	219	Evaluating formatted alphanumeric displays

NUMBER 3

	i	Softstrip® data strip containing the table of contents of this issue
Patricia A. Evans, James E. Bailey, William C. Moor and **Ardell L. Roberts**	227	An instrument for measuring effectiveness of information systems
G. Allen Pugh	237	An algorithm for economically setting a uniformly-shifting process
David J. Sumanth and **Mehmet Dedeoglu**	241	Application of Expert Systems to productivity measurement in companies/organizations
A. Ravindran, B. L. Foote, A. Badiru, L. Leemis and **Larry Williams**	251	Mechanized material handling systems design and routing
Kwangsoo Kim and **John E. Biegel**	271	An integrated approach to sculptured surface design and manufacture

Hamdy A. Taha	281	The SIMNET simulation language
Douglas Gemmill and **Susan D. Jensen**	297	Forecasting capital funding necessary to meet hospital equipment replacement requirements
Pratapray (Paul) Thacker and **A. J. G. Babu**	307	Effects of graphic boundaries in tabular displays: a human factors evaluation
Theodore J. Sheskin	315	Scheduling experiments on the space station
Yong Deok Noh and **Bruce Herring**	325	Matrix generation algorithm for an *M*-stage closed tandem queue with blocking
James R. Evans and **William M. Lindsay**	335	A framework for expert system development in statistical quality control
James T. Luxhoj and **Marilyn S. Jones**	345	A computerized population model for system repair/ replacement
R. C. Mishra, P. C. Pandey and **J. L. Gaindhar**	361	Multi-product flowshop scheduling with ordered processing times
Harold Beckstrom, K. A. Ebeling and **J. Stanislao**	365	CIM includes the experimental shop

NUMBER 4

	i	Softstrip® data strip containing the table of contents of this issue
Reuven R. Levary	371	A sequential solution procedure to stochastic capital budgeting models
Paul F. Petersen and **R. P. Davis**	381	Data sources for microcomputer component selection
Jatinder N. D. Gupta and **Sushil K. Gupta**	387	Single facility scheduling with nonlinear processing times
Rong-Kwei Li and **David D. Bedworth**	395	A framework for the integration of computer-aided design and computer-aided process planning
Jay Liebowitz	415	Beyond decision support systems: the role of operations research in expert systems
Chao-Hsien Chu, Hsu-Pin (Ben) Wang and **Ying-Chan Chu**	419	On the design of an intelligent micro-based DSS for line balancing
Gifford L. Martin Jr, Sabah U. Randhawa and **Edward D. McDowell**	429	Computerized container-ship load planning: a methodology and evaluation

Bernard J. Schroer and **Ernst P. Goss**	441	Design considerations for a state level energy data-base management system
Bernard J. Schroer and **Fan T. Tseng**	455	Modelling complex manufacturing systems using discrete event simulation
V. K. Khare, M. K. Khare and **M. L. Neema**	465	Combined computer-aided approach for the facilities design problem and estimation of the distribution parameter in the case of multigoal optimization
Bartholomew O. Nnaji and **Mary Yannacopoulou**	477	A utility theory based robot selection and evaluation for electronics assembly
Robert L. Williams and **Anil K. Gupta**	495	Determination of minimum cutting tool paths in the presence of barriers
Jacob Shor and **Tzvi Raz**	503	Assessing the impact of human factors on data processing inspection errors